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Compiled by
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January 1, 1984

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Jet Propulsion Laboratory
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Pasadena, California

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ABS: The bibliographical listings in this publication are documentation products associated with the solar thermal power system project carried out by the Jet Propulsion Laboratory from 1976 to 1983. Documents listed are categorized as conference and journal papers, JPL external reports, JPL internal reports, or contractor reports. Alphabetical listings by title were used in the bibliography itself to facilitate location of the document by subject. Two indexes are included for ease of reference: one, an author index; the other, a topical index.

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ABSTRACT

The bibliographical listings in this publication are documentation products associated with the Solar Thermal Power Systems Project carried out by the Jet Propulsion Laboratory from 1976 to 1983.

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This report was compiled by the Jet Propulsion Laboratory, California Institute of Technology, for the U.S. Department of Energy Solar Thermal Division Technical Program Integrator at Sandia National Laboratories-Livermore through an agreement with the National Aeronautics and Space Administration (NASA Task RE-152, Amendment 342, Change 4; SNL(L)/DOE/NASA Interagency Agreement No. 92-9458).

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SECTION I

INTRODUCTION

In 1976 the Jet Propulsion Laboratory (JPL) was given responsibility for solar thermal parabolic dish technology development by the Energy Research and Development Administration (predecessor agency to the current U.S. Department of Energy). Initial comparative assessment studies conducted by the JPL Solar Thermal Power Systems (TPS) Project showed that, in addition to central receivers, distributed receivers, such as dishes having power conversion units at their focal points, had potential for cost-effective production of electricity.

This Bibliography of JPL-related efforts in solar thermal parabolic dish/dish-electric technology development is a comprehensive list of reports published by JPL or its contractors during the time period from 1976 through 1983. It was assembled to help facilitate an orderly transition of work on this technology from JPL to Sandia National Laboratories-Albuquerque (SNLA) during 1984. Compilation of the listings was made through reference to records kept by the TPS Project and the JPL library and through a survey of documents used as sources for TPS work. Material was also contributed by individuals who had been involved in the TPS Project during the eight-year period.

An objective in assembling the Bibliography was to include those publications deemed most central to the work of the project and those for which complete reference background is available. Not included are status reports which were prepared periodically for specific events and would be less useful from a technological perspective. The Bibliography, which covers the full range of the TPS effort from the standpoints of time, subject matter, and participants, is divided into six parts:

- (1) Conference and Journal Papers
- (2) External Reports
- (3) Internal Reports
- (4) Contractor Reports
- (5) Author Index
- (6) Topical Index

Papers in the first four areas are arranged alphabetically by title to aid in identification of subject material. The Topical Index provides more specific guidance for locating a particular area in which the TPS Project was involved. The majority of the publications are included in a library of JPL documents managed by the DOE Solar Thermal Division's Technical Program Integrator's Office at Sandia National Laboratories in Livermore, California. Copies of external publications listed can be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161.

An update of this Bibliography, which will include TPS reports and papers published during 1984, is planned for issuance before the end of the calendar year.

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